WHAT IS CLAIMED IS:

- 1. A remote control system for one or more semiconductor manufacturing apparatuses capable of accessing a supervisory device of said one or more semiconductor manufacturing apparatuses from a remote operation device through a communication line, wherein said remote operation device displays the same screen as that displayed in the said supervisory device, and enables the same operations as those carried out by said supervisory device to be performed on said one or more semiconductor manufacturing apparatuses.
- 2. The remote control system for one or more semiconductor manufacturing apparatuses according to claim 1, wherein said supervisory device performs user authentication when said remote operation device is connected to said supervisory device.
- 3. A semiconductor manufacturing apparatus connected to said supervisory device accessible to said remote operation device according to claim 1.
- 4. A remote operation device for use with said remote control system for one or more semiconductor manufacturing apparatuses according to claim 1.
- 5. A remote control system for one or more semiconductor manufacturing apparatuses comprising:
- a local area network system including a host device and one or more semiconductor manufacturing apparatuses; and

a remote operation device with a communication element accessible to said host device on the semiconductor manufacturing side by way of a communication line;

wherein said host device is provided with an IP routing function and protocols necessary for achieving remote control operation from said remote operation device, and a communication element having a call incoming function of receiving a call incoming from said communication line, and

said host device serves to perform user authentication when said remote operation device tries to connect to said host device, so that said remote operation device thus authenticated can display the same screen as that displayed on said host device, remotely control and operate said host device.

- 6. The remote control system for one or more semiconductor manufacturing apparatuses according to claim 5, wherein said host device and said remote operation device each have a modem as said communication element for enabling connection between said host device and said remote operation device through an analog line or network.
- 7. The remote control system for one or more semiconductor manufacturing apparatuses according to claim 5, wherein said host device and said remote operation device each have a terminal adapter as said communication element for enabling connection between said host device and said remote operation device through an ISDN line or network.
- 8. A remote control system for one or more semiconductor manufacturing apparatuses comprising:
- a local area network system including a plurality of host devices each connected with one or more semiconductor manufacturing

apparatuses, and a router as its communication element connected with said host devices; and

a remote operation device with a router as its communication element accessible to said host devices on the semiconductor manufacturing apparatus side by way of a communication line;

wherein said host devices are each provided with an IP routing function and protocols necessary for achieving remote control operation from said remote operation device, and a communication element having a call incoming function of receiving a call incoming from said communication line, and

said host devices each serve to perform user authentication when said remote operation device tries to connect to said host devices, so that said remote operation device thus authenticated can individually display the same screen as that displayed on each of said host devices, remotely control and operate said host devices.

- 9. The remote control system for one or more semiconductor manufacturing apparatuses according to claim 8, wherein said communication line connecting between said host devices and said remote operation device comprises the Internet.
- 10. The remote control system for one or more semiconductor manufacturing apparatuses according to claim 8, wherein said communication line connecting between said host devices and said remote operation device comprises a local area network or a wide area network.
- 11. A remote control system for one or more semiconductor manufacturing apparatuses comprising:
 - a local area network system including a plurality of host devices

each connected with one or more semiconductor manufacturing apparatuses, and an access server as its communication element connected with said host devices; and

a plurality of remote operation devices with a plurality of communication elements, respectively, accessible to said host devices on the semiconductor manufacturing apparatus side by way of a plurality of communication networks;

wherein said host devices are each provided with an IP routing function and protocols necessary for achieving remote control operation from each of said remote operation devices, and

said host devices each serve to perform user authentication when each of said remote operation devices tries to connect to said host devices, so that each of said remote operation devices thus authenticated can individually display the same screen as that displayed on each of said host devices, remotely control and operate said host devices.

12. The remote control system for one or more semiconductor manufacturing apparatuses according to claim 11, wherein said plurality of communication networks connecting between said host devices and said remote operation devices include a public telephone network, an ISDN network, the Internet, a local area network and a wide area network.